

### REMARKS

This responds to the Office Action mailed on March 10, 2009. Applicant had filed a RCE and this is the first Examination since the RCE filing.

Previously filed Claims 1 – 13 remain active in this application. Claims 14 – 23 have been previously canceled. Independent claims 1 and 7 have been amended. Minor changes have been made to Claims 5, 8 and 12. New dependent claims 24 and 25 have been added.

All of the claims stand rejected under 35 U.S.C. § 103(a) over Eggleton et al. (USP 6,438,277) in view of Rabiei et al. (P. Rabiei, W.H. Steir, C. Zhang, L.R. Dalton, "Polymer Micro-Ring Filters and Modulators", J. Lightwave Tech., Vol.20, No. 11, November 2002, pp. 1968-1975), some claims were rejected in further view of additional references.

In previous responses thereto, Applicant submitted a Rule 131 Declaration to remove the Rabiei et al. reference. In the Advisory Action, the Examiner had entered the Rule 131 Declaration, but denied Allowance of the application. The Examiner cited a lack of Kelvin probe limitations in the independent claims and expressed concern that the logic device/logic means having a memory and a processor were not specifically addressed in the Rule 131 Declaration previously submitted.

Accompanying The Request for Continuing Examination Applicant addressed the claim limitation concerns by adding the use of a Kelvin probe to the independent claims. Additionally, Applicant submitted a Supplemental Rule 131 Declaration to address the Examiner's concerns regarding support for logic devices/means dating to the time of the invention.

The Examiner's contention that memory and microprocessor were not contemplated by the Inventors at the time of the invention which was before November 2000 is simply wrong. Memory devices and microprocessor were well known since the

early 1970's. In the Inventor's Declaration, particularly Sections 7 – 9, the inventor avers that he envisioned a logic means as part of the invention for hosting a control algorithm and that the logic means would include a memory and processor. Please note that the Specification as filed contained the term "Processor 40". Before November 2000 it was well known for logic devices to contain memory and microprocessors.

To further address the Examiner's concerns the Claims 1 and 7 have been amended to state the language used in the original invention disclosure—that is of a logic device used as readout circuitry, which admittedly predates the Rabiei reference. As stated in paragraph 5 of the Office Action the Examiner recognizes the predating of the Rabiei reference as to "any type of logic device [is] with respect to readout circuitry".

The invention is a feedback controlled photonic frequency selection circuit capable of selecting a particular frequency of light in a deliberate stepped manner. The Examiner admits that Eggleton "...does not disclose a photonic circuit being capable of selecting a particular frequency of light in a deliberate stepped manner." The recitation of Rabiei et al. was used in each and every one of the obvious rejections as a secondary reference in conjunction with Eggleton et al. and sometimes in view of further other references to show a thermally tuned resonator for adjusting its center wavelength. The Rabiei et al. publication only discloses a prototype of a steady state device where the temperature is controlled to pick off on frequency. There is no feedback loop shown. With removal of the Rabiei et al. reference the present application is allowable.

Claims 1 and 7 are similar to the claims as originally filed and are not new. There is no need for a new search by the Examiner. To re-iterate, the Examiner recognizes the predating of Rabiei et al with respect to any logic device as part of readout circuitry in the invention. Hence the patent application is allowable over the cited prior art.

The Examiner has objected to Claims 5, and 8 – 12 for lack of clarity. Claims 5, 8 and 12 have been amended to clarify the addition of the Kelvin probe in claim 1 and 7 and to clearly state the imbedded resistor which may be formed of aluminum.

Since the logic means in Claim 1 and the logic device in Claim 7 was amended to read along the lines of the invention disclosure predating the Rabiei et al reference, new claims 24 and 25 have been added to add these patentable features as dependencies on claims 1 and 7 respectively.

The newly cited reference to T.R. Kuphaldt, "Lessons in Electric Circuits – Volume I – DC", 5<sup>th</sup> Edition, 2000-20008, pages 282 – 288 has been reviewed and not found to render the invention unpatentable.

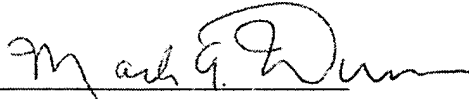
### CONCLUSION

Since all rejection, objections and requirement contained in the outstanding official action have been fully addressed, it is respectfully submitted that reconsideration of the present application be made. A notice of allowance is earnestly requested.

Previously 23 claims have been paid for. After this amendment only 15 remain so no fees are required. If for any reason fees are deemed necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0130 on behalf of Customer No. 22,500.

Respectfully Submitted,

Dated: June 10, 2009

By: 

For: Customer No. 22500


Mark A. Wurm

Reg. No. 31,682

Tel.: (703) 867-8334

6600 Ladyslipper Lane

Clifton, Virginia 20124

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner for Patent, P.O. Box 1450, Alexandria, VA 22313-1450 on June 10, 2009. By  (Mark A. Wurm)  
Date 10 June 2009